ENGLISH

CHAPTER IV
DETAIL DESIGN

DESIGN CRITERIA	MINOR ARTERIAL STREETS				PRINCIPAL ARTERIAL STREETS		
NUMBER LANES	2.00	3.00	4.00	5.00	2, 3 OR 4	5.00	6.00
DESIGN TRAFFIC (ADT)	<9,000	5,000 - 15,000	9,000 - 25,000	10,000 - 40,000	---	---	---
DESIGN SPEED (mph)	40.00	40.00	40.00	40.00	40.00	40.00	45.00
LANE WIDTH (ft)	12.00	12.00	12.00	12.00	12.00	12.00	12.00
PARKING LANE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
MEDIAN WIDTH (ft)	---	---	0-16 (5)	10-16 FLUSH	14 (5)	14 FLUSH (5)	26 (3)
SIDEWALK (MINIMUM) (ft)	5.00	5.00	5.00	5.00	5.00	5.00	5.00
CURVATURE (MAXIMUM) (DEGREE) (6)	10.00	10.00	10.00	10.00	10.00	7.50	7.50
GRADIENT (MAXIMUM) (%)	6.00	6.00	6.00	5.00	5.00	5.00	5.00
STOPPING SIGHT DISTANCE (ft)	275-325	275-325	275-325	275-325	275-325	275-325	325-400
SAG VERTICAL CURVE (K VALUE)	60-70	60-70	60-70	60-70	60-70	60-70	70-90
CURB AND GUTTER (ft)	3.00	3.00	3.00	3.00	---	---	---
PAVEMENT	SEE SECTION 6-03				SEE SECTION 6-03		
SHOULDERS (ft) (7)	8 OR 10	10.00	10 OR 12	10 OR 12	10 OR 12	10 OR 12	10 OR 12
PROTECTED LEFT-TURN LANES (SEE SECT.)	4-05	4-05	4-05	4-05	YES	YES	YES
TRAFFIC CONTROL SIGNALS	CHECK WARRANTS	CHECK WARRANTS	CHECK WARRANTS	CHECK WARRANTS	YES	YES	YES
OUTER ROADWAYS	---	---	---	---	IF NEEDED (2)	IF NEEDED (2)	IF NEEDED (2)
ACCESS CONTROL	NORMAL (4)	IF NEEDED (4)	IF NEEDED (4)	IF NEEDED (4)	FULL OR PARTIAL	FULL OR PARTIAL	FULL OR PARTIAL
R/W (NORMAL) (ft)	60.00	60 2 WAY LT. TURN	80.00	100 2 WAY LT, TURN	VARIABLE (1) 2 WAY LT. TURN	VARIABLE (1) 2 WAY LT. TURN	VARIABLE (1)
LIGHTING	---	---	---	---	---	---	DESIRABLE
SUPERELEVATION (ft/ft)	0.04	0.04	0.04	0.04	0.04	0.04	0.04

NOTES:

(1) MINOR CROSSROADS ARE TO BE ELIMINATED. IF PRACTICAL, PROVIDE INTERCHANGES OR CHANNELIZED TREATMENT OF MAJOR CROSSROADS WHEN CROSSING AND TURNING TRAFFIC IS HEAVY. ACCESS IS CONTROLLED BY EITHER ACQUISITION OF ACCESS RIGHTS OR FRONTAGE ROADS.

(2) FENCING BETWEEN EXPRESSWAY AND FRONTAGE ROADS MAY BE NECESSARY TO CONTROL PEDESTRIAN TRAFFIC ACROSS EXPRESSWAY.

(3) MEDIAN-BARRIER IS INCLUDED IN THE WIDTH.

(4) ACCESS CONTROL - ACCESS LIMITED TO PRESENT STREETS, ALLEYS AND DRIVES OVER IMPROVEMENT OF EXISTING STREET.

(5) LEFT TURN STORAGE BAY FOR TWO LANE AND FOUR LANE STREETS.

(6) SPIRAL CURVES ARE NOT USED ON MINOR ARTERIAL AND PRINCIPAL ARTERIAL STREETS.

(7) FOR HEAVY AND MEDIUM DUTY PAVEMENTS, THE OUTSIDE TYPE U1 SHOULDER WIDTH IS 12 ft. FOR LIGHT DUTY PAVEMENT IN AREAS WHERE THE SHOULDER IS EXPECTED TO BE A TRAFFIC LANE IN THE FORESEEABLE FUTURE, THE OUTSIDE TYPE U1 SHOULDER WIDTH IS 12 ft.

(8) SIDEWALK WIDTHS LESS THAN 5 FT. MAY BE USED, IF A 5 X 5 FT. PASSING SPACE IS PROVIDED AT INTERVALS NOT TO EXCEED 200 FT. SUCH FEATURES AS DRIVEWAYS AND SIDEWALK INTERSECTIONS ARE CONSIDERED ACCEPTABLE PASSING SPACES. THE ABSOLUTE MINIMUM SIDEWALK WIDTH IS 4 FT.

Basic Design Criteria

METRIC

CHAPTER IV
DETAIL DESIGN

DESIGN CRITERIA	MINOR ARTERIAL STREETS				PRINCIPAL ARTERIAL STREETS		
NUMBER LANES	2.00	3.00	4.00	5.00	2, 3 OR 4	5.00	6.00
DESIGN TRAFFIC (ADT)	<9,000	5,000 - 15,000	9,000 - 25,000	10,000 - 40,000	---	---	---
DESIGN SPEED (km/h)	60.00	60.00	60.00	60.00	60.00	60.00	70.00
LANE WIDTH (m)	3.60	3.60	3.60	3.60	3.60	3.60	3.60
PARKING LANE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
MEDIAN WIDTH (m)	---	---	0-4.8 (5)	3.0 - 4.8 FLUSH	4.2 (5)	4.2 FLUSH (5)	7.8 (3)
SIDEWALK (MINIMUM) (m)	1.50	1.50	1.50	1.50	1.50	1.50	1.50
CURVATURE (MINIMUM) (RADIUS) (m) (6)	125.00	125.00	125.00	125.00	125.00	125.00	175.00
GRADIENT (MAXIMUM) (%)	6.00	6.00	6.00	5.00	5.00	5.00	5.00
STOPPING SIGHT DISTANCE (m)	80-90	80-90	80-90	80-90	80-90	80-90	80-90
SAG VERTICAL CURVE (K VALUE)	15-18	15-18	15-18	15-18	15-18	15-18	20-25
CURB AND GUTTER (m)	0.90	0.90	0.90	0.90	---	---	---
PAVEMENT	SEE SECTION 6-03				SEE SECTION 6-03		
SHOULDERS (m) (7)	2.4 OR 3.0	3.0	3.0 OR 3.6	3.0 OR 3.6	3.0 OR 3.6	3.0 OR 3.6	3.0 OR 3.6
PROTECTED LEFT-TURN LANES (SEE SECT.)	4-05	4-05	4-05	4-05	YES	YES	YES
TRAFFIC CONTROL SIGNALS	CHECK WARRANTS	CHECK WARRANTS	CHECK WARRANTS	CHECK WARRANTS	YES	YES	YES
OUTER ROADWAYS	---	---	---	---	IF NEEDED (2)	IF NEEDED (2)	IF NEEDED (2)
ACCESS CONTROL	NORMAL (4)	IF NEEDED (4)	IF NEEDED (4)	IF NEEDED (4)	FULL OR PARTIAL	FULL OR PARTIAL	FULL OR PARTIAL
R/W (NORMAL) (m)	18.00	18 2 WAY LT. TURN	24.00	30 2 WAY LT, TURN	VARIABLE (1) 2 WAY LT. TURN	VARIABLE (1) 2 WAY LT. TURN	VARIABLE (1)
LIGHTING	---	---	---	---	---	---	DESIRABLE
SUPERELEVATION (m/m)	0.04	0.04	0.04	0.04	0.04	0.04	0.04

NOTES:

(1) MINOR CROSSROADS ARE TO BE ELIMINATED. IF PRACTICAL, PROVIDE INTERCHANGES OR CHANNELIZED TREATMENT OF MAJOR CROSSROADS WHEN CROSSING AND TURNING TRAFFIC IS HEAVY. ACCESS IS CONTROLLED BY EITHER ACQUISITION OF ACCESS RIGHTS OR FRONTAGE ROADS.

(2) FENCING BETWEEN EXPRESSWAY AND FRONTAGE ROADS MAY BE NECESSARY TO CONTROL PEDESTRIAN TRAFFIC ACROSS EXPRESSWAY.

(3) MEDIAN-BARRIER IS INCLUDED IN THE WIDTH.

(4) ACCESS CONTROL - ACCESS LIMITED TO PRESENT STREETS, ALLEYS AND DRIVES OVER IMPROVEMENT OF EXISTING STREET.

(5) LEFT TURN STORAGE BAY FOR TWO LANE AND FOUR LANE STREETS.

(6) SPIRAL CURVES ARE NOT USED ON MINOR ARTERIAL AND PRINCIPAL ARTERIAL STREETS.

(7) FOR HEAVY AND MEDIUM DUTY PAVEMENTS, THE OUTSIDE TYPE U1 SHOULDER WIDTH IS 3.6 m. FOR LIGHT DUTY PAVEMENT IN AREAS WHERE THE SHOULDER IS EXPECTED TO BE A TRAFFIC LANE IN THE FORESEEABLE FUTURE, THE OUTSIDE TYPE U1 SHOULDER WIDTH IS 3.6 m.

(8) SIDEWALK WIDTHS LESS THAN 1.5 M MAY BE USED, IF A 1.5 X 1.5 M PASSING SPACE IS PROVIDED AT INTERVALS NOT TO EXCEED 60 M. SUCH FEATURES AS DRIVEWAYS AND SIDEWALK INTERSECTIONS ARE CONSIDERED ACCEPTABLE PASSING SPACES. THE ABSOLUTE MINIMUM SIDEWALK WIDTH IS 1.2 M.

Basic Design Criteria